IN THE CLAIMS:

Claims 1-18 (Canceled).

19. (Original) A heterojunction bipolar transistor comprising:

a collector;

a base disposed above the collector, the base comprising a silicon-germanium layer;

a germanium-enriched region proximate an upper surface of the base and within the silicon-germanium layer; and

an emitter overlying the germanium-enriched region.

20. (Original) The heterojunction bipolar transistor of claim 19 wherein the germanium-enriched region creates a band-gap differential between the emitter and the base.

21. (Original) The heterojunction bipolar transistor of claim 19 wherein carrier mobility is greater in the germanium-enriched region than in the base.

22. (Original) The heterojunction bipolar transistor of claim 19 wherein the germanium-enriched region comprises a strained germanium-enriched region.

23. (Original) The heterojunction bipolar transistor of claim 19 wherein a germanium concentration in the germanium-enriched region ranges from about 30 percent to about 75 percent.

24. (Original) The heterojunction bipolar transistor of claim 19 wherein a germanium concentration is greater in the germanium-enriched region than in the silicon-germanium layer.

25. (Original) The heterojunction bipolar transistor of claim 19 having a valence band offset of greater than about 0.21 eV.

26. (Original) The heterojunction bipolar transistor of claim 19 wherein the germanium-enriched region has a relatively low level of lattice defects.

27. (Original) The heterojunction bipolar transistor of claim 19 wherein the base comprises a graded doped silicon-germanium base or a stepped doped silicon-germanium base.

28. (Original) The heterojunction bipolar transistor of claim 19 wherein the base comprises a uniformly doped silicon-germanium base.

29. (Original) The heterojunction bipolar transistor of claim 19 wherein the germanium-

enriched region is in eontact with the emitter.

30. (Original) The heterojunction bipolar transistor of claim 19 wherein a concentration of germanium in the germanium-enriched region decreases abruptly from a concentration proximate the upper surface in a direction toward the collector.

31. (Original) A bipolar junction semiconductor comprising:

a silicon substrate;

a collector disposed in the substrate;

a base disposed overlying the collector, wherein the base comprises a silicon-germanium portion;

a germanium-enriched region formed in the silicon-germanium portion, wherein a concentration of germanium in the germanium-enriched region is substantially greater than the concentration of germanium in the silicon-germanium portion; and

an emitter disposed overlying the germanium-enriched region

32. (Original) The bipolar junction semiconductor of claim 31 wherein the germanium-enriched region comprises a thermally oxidized enriched region.

33. (Original) The bipolar junction semiconductor of claim 31 wherein the germanium enriched region includes at least a 30% germanium concentration.